

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims

1. (currently amended) A device (1) for controlling an a direct injection internal combustion engine (500), ~~characterized in that~~ comprising
a calculation means (410) which, before a start of the engine, recognizes a possible self-ignition operating state as a function of operating parameters and ascertains suitable control parameters for preventing this possible self-ignition operating state; and means for varying an injection of fuel into a cylinder such that fuel injection does not occur until, on starting, the cylinder entering a compression phase or an intake phase has passed its top dead center.
2. (currently amended) A method for controlling an a direct injection internal combustion engine, ~~characterized in that~~ comprising the steps of:
recognizing, before a start of the engine, as a function of operating parameters, a possible self- ignition operating state is ~~recognized~~, and
ascertaining control parameters suitable for preventing this possible self- ignition operating state ~~are ascertained~~; and
varying an injection of fuel into a cylinder such that fuel injection does not occur until, on starting, the cylinder entering a compression phase or an intake phase has passed its top dead center.
3. (currently amended) The device ~~or method as defined by~~ according to claim 1, ~~characterized in that as a function of the control parameters,~~ wherein said means for

varying is configured to vary at least a starter and/or an injection device is varied as a function of the control parameters.

4. (currently amended) The device ~~or method as defined by~~ according to claim 1, ~~characterized in that for ascertaining the control parameters, wherein said calculation means is configured to take into account~~ at least the position of a cylinder that on starting is the first to enter compression or begin an intake stroke and a variable that represents a combustion chamber temperature ~~are taken into account as operating parameters~~ for ascertaining the control parameters.

5. (currently amended) The device ~~and method as defined by~~ according to claim 4, ~~characterized in that for ascertaining the control parameters, wherein said calculation means is configured to take into account~~ an intake air temperature ~~is taken into account for ascertaining the control parameters.~~

6. (canceled)

7. (currently amended) The device ~~or method as defined by~~ according to claim 1, ~~characterized in that~~ wherein said means for varying is configured to vary the rpm of the starter ~~is varied~~ such that the combustion chamber temperature remains below a critical temperature threshold.

8. (currently amended) The device ~~or method as defined by~~ according to claim 1, ~~characterized in that~~ wherein said means for varying is configured to vary the rpm of the starter ~~is varied~~ such that the combustion chamber pressure remains below a critical pressure threshold.

9. (currently amended) The device ~~or method as defined by~~ according to claim 1, ~~characterized in that~~ wherein said means for varying is configured to increase an injection quantity ~~is increased~~ such that the combustion chamber temperature remains below, or drops below, a critical temperature threshold.

10. (new) The method according to claim 2, further comprising varying at least a starter and/or an injection device as a function of the control parameters.
11. (new) The method according to claim 2, further comprising taking into account at least the position of a cylinder that on starting is the first to enter compression or begin an intake stroke and a variable that represents a combustion chamber temperature as operating parameters for ascertaining the control parameters.
12. (new) The method according to claim 11, further comprising taking into account an intake air temperature for ascertaining the control parameters.
13. (new) The method according to claim 2, further comprising varying the rpm of the starter such that the combustion chamber temperature remains below a critical temperature threshold.
14. (new) The method according to claim 2, further comprising varying the rpm of the starter such that the combustion chamber pressure remains below a critical pressure threshold.
15. (new) The method according to claim 2, further comprising increasing an injection quantity such that the combustion chamber temperature remains below, or drops below, a critical temperature threshold.